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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,728	01/12/2004	Sheng-Nan Lu	BHT-3215-66	1363

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EXAMINER

KYLE, MICHAEL J

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/754,728

Applicant(s)

LU ET AL.

Examiner

Michael J. Kyle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/12/2004
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-5 are rejected under 35 U.S.C. 102(a) as being anticipated by Kang et al (“Kang”, U.S. Patent Application Publication 2003/0040288). Kang discloses a dual directional hinge comprising a first hinge member having a first tubular part (710, see figure 9) with a passage having a pintle received therein (see figure 6), and an opening (711) radially defined at a top side of the first tubular part. Kang further disclose a second hinge member (see figure 9) perpendicular to the first hinge member mounted in the opening (711). The second hinge member has a second tubular part (770) received in the opening. Two arms (775b) are formed at diametrically opposite sides of the second tubular part (770). A resilient member (169) is received in the second tubular part (770). An upper disk (160) is securely received in the second tubular part under the resilient member and has ridge formed at a bottom surface, and a hole defined therein. Kang also discloses a lower disk (150) below the upper disk (160) with a channel defined at a top surface. A shaft (130) securely extends though the first hinge member (710) and the lower disk (150) and rotatably extends though the upper disk (160), the resilient member (169), and the second tubular part (770).
3. With respect to claim 2, Kang discloses the first hinge member to have an aperture with a non-circular cross segment beneath the opening (711) and in communication with the opening.

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The lower disk (150) has a non-circular hole, and the shaft (130) has a lower part of non-circular cross section matching the segment of the aperture and non-circular hole of the lower disk.

4. With respect to claim 3, Kang discloses the second tubular part (770) has two slots and the upper disk (160) has two stops (projecting radially outward as shown in figure 9) positioned in the slots.

5. With respect to claim 4, Kang disclose the ridge and channel of the upper and lower disks, respectively, to be diametrically defined.

6. With respect to claim 5, Kang discloses the shaft (130) to have a ring recess at the top end thereof, extending out of the second tubular part (770), with a collar (181) fastened in the recess.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kang. Kang does not disclose the protrusion and lug assembly as claimed. Alternatively, Kang discloses the first tubular part to have two slots (717) and the second tubular part to have two wings (775a) with a one lug (775d). This arrangement defines the range of motion of the second tubular part relative the to the first tubular part. It appears that no new or unexpected result is produced by applicant's arrangement of the protrusion and lugs over the prior art arrangement of a lug and

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slots. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Kang, such that a protrusion is formed at the top side of the first tubular part, and two lugs are formed on the second tubular part, in order to define the range of the motion of the second part relative to the first part, as no new or unexpected result arises from such a modification.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references are cited to further show the state of the art with respect to dual directional hinges: Kfoury, Chien et al, Lu et al (U.S. Patent no. 6,742,221), Lu et al (U.S. Patent No. 6,845,546), Haraguchi et al, Kim et al, Hsu, Jung et al, and Hung.

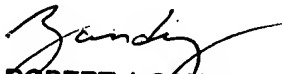
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Kyle whose telephone number is 571-272-7057. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mk


ROBERT J. SANDY
PRIMARY EXAMINER